

# SYSTEM AND PROCESS FOR PRODUCING HALOGEN OXIDES

## Abstract

A system and process for oxidizing inorganic or organic species is disclosed. The system and process includes feeding a dilute aqueous alkali metal halite solution into a cation exchange column, wherein the cation exchange column contains a cation exchange material; contacting the dilute aqueous alkali metal halite solution with the cation exchange material to produce an effluent containing halous acid; feeding the effluent containing halous acid into a catalytic reactor containing a catalytic material; and contacting the halous acid containing effluent with the catalytic material to produce a halogen oxide

## Figures

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